

# Diff-Calc

## General



Diff-Calc is applied for calculation of the difference between 4 - 20 mA signals from transmitters. Diff-Calc is especially designed for measurement of level differences where Diff-Calc is connected to two ultrasonic- or pressure level transmitters.

Diff-Calc can be applied on all 4 - 20 mA signals, for calculation of temperature difference, difference between pH values etc.

## Features

- Price competitive unit for measurement of differences such as levels, temperature etc.
- Easy to install; DIN-rail mounting.
- Power supplied from the measuring signal.
- 0-point 4 mA or 12 mA.
- Span 4 - 20 mA.

## Function

The two inputs and the output are for 4 - 20 mA, and the output is the difference between the two input signals. Diff-Calc is loop supplied from the input signals while the inputs must be supplied separately.

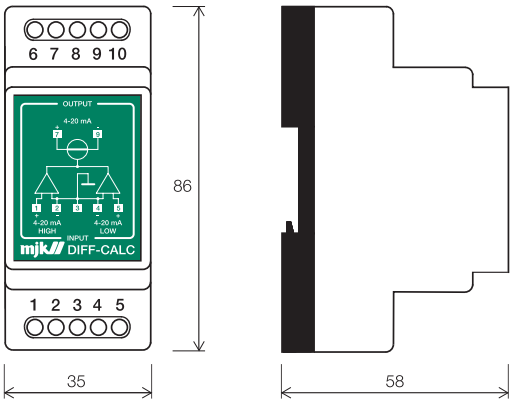
To calculate the right difference, both inputs must have the same signal; e.g. 0 - 3 m VS at level measurement or 0 - 50 °C at temperature measurement.

## Specifikations

|               |                                                                                                                                                                                                 |              |                  |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------|
| Inputs:       | 2 x 4 - 20 mA                                                                                                                                                                                   | Temperature: | - 20 ... + 60 °C |
| Voltage drop: | < 1 V                                                                                                                                                                                           | Accuracy:    | < 1 %            |
| Output:       | 4 - 20 mA                                                                                                                                                                                       | Enclosure:   | IP 22            |
| Supply:       | 10 - 30 V DC                                                                                                                                                                                    | Mounting:    | DIN rail         |
| Calculation:  | <p><i>v. 0-point = 4 mA:</i></p> $\text{OUTPUT} = \text{INPUT HIGH} - \text{INPUT LOW}$ <p><i>v. 0-point = 12 mA:</i></p> $\text{OUTPUT} = \frac{\text{INPUT HIGH} - \text{INPUT LOW}}{2} + 12$ |              |                  |

6.5

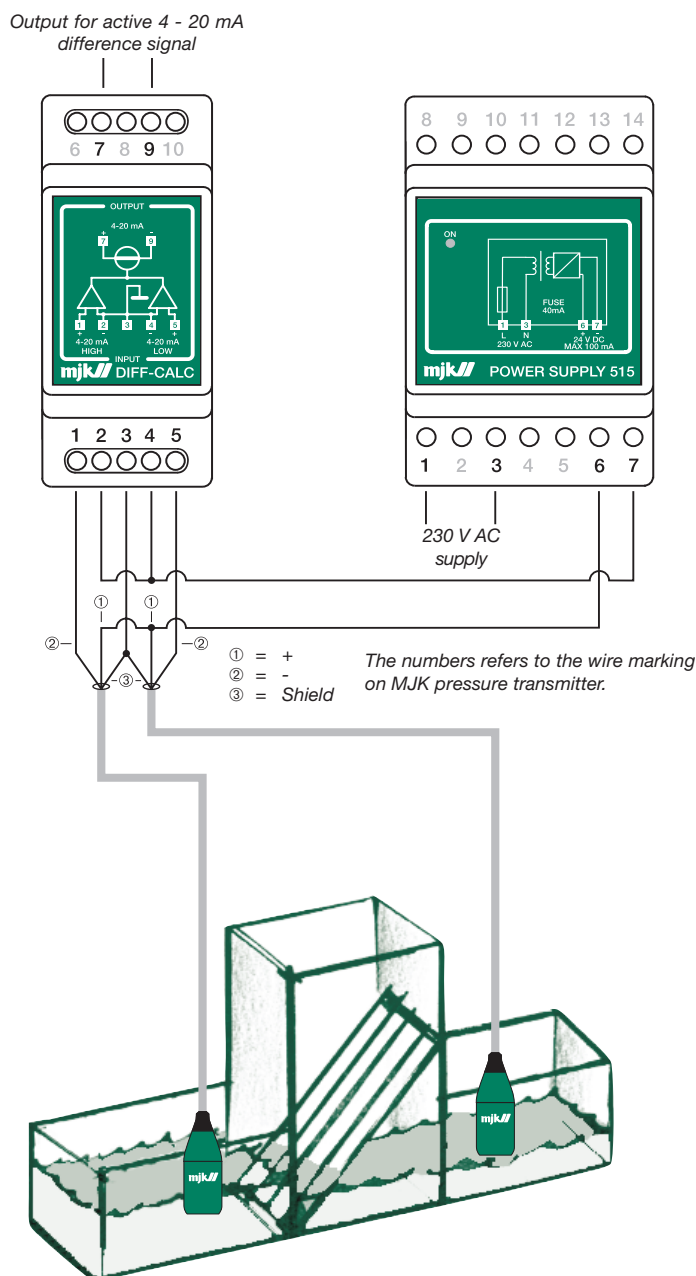
## Dimensions



## Electrical connection

The example shows an inlet screen where the cleaning is controlled by the level difference before and after the screen.

The pressure transmitters are supplied with a MJK Power Supply 515.



## Order numbers

## Diff-Calc

|        |                                                                           |
|--------|---------------------------------------------------------------------------|
| 202480 | Diff-Calc without sensor                                                  |
| 202482 | Diff-Calc including 2 pcs. pressure transmitters (202930), range 0 - 3 m  |
| 202484 | Diff-Calc including 2 pcs. pressure transmitters (202935), range 0 - 10 m |
| 202930 | Pressure transmitter 7060, range 0 - 3 m                                  |
| 202935 | Pressure transmitter 7060, range 0 - 10 m                                 |